

PROSPECTUS SUPPLEMENT DATED MAY 10, 2023
(To Prospectus Supplement dated February 22, 2023
and accompanying Prospectus dated March 1, 2022)



\$500,000,000

HANNON ARMSTRONG SUSTAINABLE INFRASTRUCTURE CAPITAL, INC.

Common Stock

This supplement, or this supplement, supplements the prospectus supplement dated February 22, 2023, or the prospectus supplement, and the accompanying prospectus dated March 1, 2022, or the accompanying prospectus, relating to the issuance and sale of shares of our common stock, par value \$0.01 per share, or our common stock, having an aggregate offering price of up to \$500,000,000, or the ATM Program, from time to time through our sales agents, B. Riley Securities, Inc., Barclays Capital Inc., BofA Securities, Inc., Credit Suisse Securities (USA) LLC, Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC, Nomura Securities International, Inc., Truist Securities, Inc. and Wells Fargo Securities, LLC, or the Continuing Sales Agents, and SMBC Nikko Securities America, Inc., by means of ordinary brokers' transactions on the New York Stock Exchange, or the NYSE, at market prices, in negotiated transactions or by any other method permitted by law deemed to be an "at-the-market" offering as defined in Rule 415 under the Securities Act of 1933, as amended, or the Securities Act, including by sales made directly on or through the NYSE or otherwise, in negotiated transactions, which may include block trades, at market prices prevailing at the time of sale or at negotiated prices, or as otherwise agreed with the applicable sales agent. This supplement shall be read in conjunction with the prospectus supplement and the accompanying prospectus. Except as set forth herein, the prospectus supplement remains unchanged.

This supplement is being filed to reflect the amendment to the prospectus supplement dated May 10, 2023, by and among the Continuing Sales Agents, KeyBanc Capital Markets Inc., Jefferies LLC and us, or the Amendment, of our sales agreement, dated May 13, 2020, as amended on February 26, 2021, March 1, 2022 and February 22, 2023, by and among us and the Continuing Sales Agents and SMBC Nikko Securities America, Inc., or the Existing Sales Agreement, to include KeyBanc Capital Markets Inc. and Jefferies LLC as participating sales agents in the ATM Program and remove SMBC Nikko Securities America, Inc. as a participating sales agent in the ATM Program. Accordingly, each reference to the term "sale agent" or "sales agents" in the prospectus supplement is hereby amended to include each of KeyBanc Capital Markets Inc. and Jefferies LLC in its capacity as sales agent and to remove SMBC Nikko Securities America, Inc. in its capacity as sales agent. Each reference to the term "Sales Agreement" in the prospectus supplement is hereby amended to refer to the Existing Sales Agreement as amended by the Amendment.

We may use a portion of the net proceeds of this offering to repay outstanding borrowings under one or more of our credit facilities. Bank of America, N.A., an affiliate of BofA Securities, Inc., Barclays Bank PLC, an affiliate of Barclays Capital Inc., Credit Suisse AG, an affiliate of Credit Suisse Securities (USA) LLC, JPMorgan Chase Bank, N.A., an affiliate of J.P. Morgan Securities LLC, KeyBank National Association, an affiliate of KeyBanc Capital Markets Inc., Morgan Stanley Senior Funding, Inc., an affiliate of Morgan Stanley & Co. LLC and Wells Fargo Bank, National Association, an affiliate of Wells Fargo Securities, LLC, are lenders under existing credit facilities, and, accordingly, Bank of America, N.A., Barclays Bank PLC, Credit Suisse AG, JPMorgan Chase Bank, N.A., Morgan Stanley Senior Funding, Inc. and Wells Fargo Bank, National Association may receive proceeds from this offering in connection with our existing credit facilities or credit facilities that we may enter into in the future and to which they or their affiliates are parties. See "Use of Proceeds" in the prospectus supplement.

As of the date of this supplement, we have sold approximately 751,415 shares of our common stock under the ATM Program for proceeds before commissions of approximately \$23.5 million, leaving approximately \$476.5 million available to be offered by this supplement, the prospectus supplement and the accompanying prospectus. Our common stock trades on the NYSE under the symbol "HASI." On May 9, 2023, the last reported sale price of our common stock on the NYSE was \$24.83 per share.

Investing in our common stock involves risks. You should carefully read and consider the "Risk Factors" beginning on page S-4 of the prospectus supplement and page 3 of the accompanying prospectus. You should also read carefully the risk factors described in our Securities and Exchange Commission filings, including our most recent Annual Report on Form 10-K, as amended, and our other periodic reports filed with the Securities and Exchange Commission, or the SEC, and incorporated by reference herein, in the prospectus supplement or in the accompanying prospectus, before investing in our common stock.

Neither the SEC nor any state securities commission has approved or disapproved of these shares or determined if this supplement, the prospectus supplement, or the accompanying prospectus are truthful or complete. Any representation to the contrary is a criminal offense.

**B. Riley Securities
Credit Suisse
J.P. Morgan
Nomura**

**Barclays
Goldman Sachs & Co. LLC
KeyBanc Capital Markets
Truist Securities**

**BofA Securities
Jefferies
Morgan Stanley
Wells Fargo Securities**

The date of this prospectus supplement is May 10, 2023.